December 2, 2022

Re: Request for Comments on the Credit for Carbon Oxide Sequestration

Notice: 2022-57

Dear Acting Commissioner Douglas O'Donnell:

Taxpayers for Common Sense (TCS) provides the following comments to the Department of the Treasury and the Internal Revenue Service (IRS) related to the "Credit for Carbon Oxide Sequestration" (Notice 2022-57).

TCS is an independent, nonpartisan budget watchdog that has been working on behalf of the nation's taxpayers since 1995. TCS works to ensure that taxpayer dollars are spent responsibly, and that the government operates within its means. This includes working to ensure that federal energy policy does not create short- or long-term liabilities for taxpayers. TCS has long been a critic of federal subsidies for carbon capture and sequestration (CCS).

There is mounting evidence that CCS is not economically viable nor an answer to our environmental challenges. Building, proving, and implementing CCS technology is prohibitively expensive. A September 2022 report by the Government Accountability Office (GAO) found that "lengthy time to deployment and high costs hinder widespread deployment of both types of carbon capture [capture technologies at point sources and direct air capture] in the near term."[1]

The effectiveness of CCS technology as a greenhouse gas emissions reduction strategy is largely untested and unproven. A report from the Intergovernmental Panel on Climate Change in 2022 ranks CCS as one of the highest cost, lowest potential options for reducing greenhouse gas emissions.[2] The GAO also found that many CO_2-based products "lack a standardized method for ensuring they effectively reduce CO_2 emissions."[3] Additionally, sequestering billions of tons of CO_2 underground annually could have unintended negative consequences, such as potentially contaminating ground water when leaks happen, and leave taxpayers with long-term environmental liabilities.

[1] Government Accountability Office (GAO), Decarbonization, September 2022. https://www.gao.gov/assets/gao-22-105274.pdf
[2] The Intergovernmental Panel on Climate Change (IPCC), Figure SPM.7: Overview of mitigation options and their estimated ranges of costs and potentials in 2030, April 2022. https://www.ipcc.ch/report/ar6/wg3/figures/summary-for-policymakers/figure-spm-7/
[3] Government Accountability Office (GAO), Decarbonization, September 2022. https://www.gao.gov/assets/gao-22-105274.pdf

Much of current CCS technology is used for enhanced oil recovery (EOR). Of the 12 commercial carbon capture projects in the United States as of 2020, 11 are capturing and injecting CO_2 for enhanced oil recovery.[4] Another project is associated with ethanol production. The Congressional Research Service noted that in the near term, most CCS projects will continue to be for EOR, with potential for use in other industries as well, such as ethanol.[5] Whether using captured carbon oxides for EOR reduces emissions on net is the subject of ongoing study. Recent papers suggest that increasingly less CO_2 is trapped underground as EOR projects continue, and the carbon footprint becomes positive (no net emission reduction). [6] This raises serious questions about the efficacy of handing out billions of dollars in 45Q credits for carbon captured and used for EOR. Furthermore, according to the International Energy Agency, the oil and gas industry is the largest annual consumer of externally sourced CO_2.[7] Now eligible to be claimed as a direct payment, the 45Q tax credit serves as a direct cash subsidy to the oil and gas industry, which is responsible for much of our global CO_2 emissions.[8]

Regarding ethanol, tax credits for CCS have the potential to further subsidize corn ethanol production, which is associated with higher – instead of lower – greenhouse gas emissions.[9] Tax credits may distort markets and cause otherwise uneconomical biofuels/CCS projects to be financially viable, expanding taxpayer subsidies for an industry that has received decades of taxpayer support despite its failings to benefit the climate or environment.[10]

Our policy preference would be to reverse course on federal support for carbon capture and sequestration. Given the expansion of the credit in the Inflation Reduction Act (IRA), it is critical that implementation of and adjustments to 45Q regulations limit waste, fraud, and abuse. The intent of 45Q and the whole suite of tax credits established to reduce greenhouse gas emissions is to mitigate the progress of climate change through reducing carbon emissions. In the absence of strong compliance and anti-fraud safeguards, taxpayers will not be getting what they are paying for.

The 45Q tax credit program already has a record of improper claims. The IRS Inspector General for Tax Administration reported that between Tax Years 2010 and 2019, $1.024 billion worth of 45Q credits were claimed by taxpayers. Of this, 87 percent ($894 million worth of credits) was claimed by taxpayers

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[4] Global CCS Institute, Global Status of CCS 2020, March 2021. https://www.globalccsinstitute.com/wp-content/uploads/2021/03/Global-Status-of-CCS-Report-English.pdf

[5] Congressional Research Service (CRS), The Tax Credit for Carbon Sequestration (Section 45Q), June 2021. https://crsreports.congress.gov/product/pdf/IF/IF11455/2

[6] Núñez-López and Moskal, "Potential of CO_2-EOR for Near-Term Decarbonization," *Frontiers in Climate*., Sept 27, 2019. https://doi.org/10.3389/fclim.2019.00005

[7] Internally sourced CO_2 refers to processes where CO_2 is produced and captured in a chemical manufacturing process, and ultimately consumed in a later process step. Externally sourced CO_2 refers to CO_2 that is external to the process and needs to be captured. Source: International Energy Agency, Putting CO_2 to Use, September 2019. https://iea.blob.core.windows.net/assets/50652405-26db-4c41-82dc-c23657893059/Putting_CO2_to_Use.pdf

[8] According to a report released by the GAO in 2022, "about 60 percent of total global methane emissions come from human activities, of which fossil fuel production, including natural gas, accounts for about 34 percent." Source: Government Accountability Office (GAO), Oil and Gas: Federal Actions Needed to Address Methane Emissions from Oil and Gas Development, May 2022. https://www.gao.gov/products/gao-22-104759

[9] Lark, et al, "Environmental outcomes of the US Renewable Fuel Standard," *Proceedings of the National Academy of Sciences*, Feb 14, 2022. https://www.pnas.org/doi/10.1073/pnas.2101084119

[10] U.S. Environmental Protection Agency, Biofuels and the Environment: Second Triennial Report to Congress (Final Report), 2018, EPA/600/R-18/195. https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=IO&dirEntryId=341491

not in compliance with the Environmental Protection Agency's (EPA's) monitoring, reporting, and verification (MRV) requirements.[11] The IRS has reported on their examination of 68% of these cases and has disallowed 59% of the noncompliant credits, approximately worth $531 million. No further update has been released since April 2020.

The IRA greatly expanded and extended the 45Q credit. It significantly increased the credit amount if wage and apprenticeship requirements are met, reduced the required carbon capture thresholds, and modified rules applicable to direct air capture and electric generating units, etc. Given the history of fraudulent claims, the Treasury/IRS must issue clear guidance on what facilities qualify, how qualified carbon oxide is measured, and require records to be maintained for verification and auditing.

TCS urges IRS to provide guidance and clarifications pertinent to the specific questions from the Request for Comments below:

.02 Definitions Question (2) What clarifications are needed regarding the definition of a qualified facility under 45Q(d)?

The Treasury/IRS should provide guidance on what constitutes sufficient proof of "**original planning and design**". The IRA extended the 45Q credit to qualified facilities that begin construction before January 1, 2033, and either

(A) construction of carbon capture equipment begins before such date, or
(B) the original planning and design for such facility includes installation of carbon capture equipment.

The term "original planning and design", if not clearly defined, could qualify facilities that begin construction before January 1, 2033, without beginning construction on carbon capture equipment, thus prolonging the potential fiscal impacts the 45Q credit will have on revenue and taxpayers.

.03 Records and Recordkeeping Question (1) What factors should the Treasury Department and the IRS consider in determining how a taxpayer can demonstrate that it satisfies the original planning and design requirement under § 45Q(d)(1)(B)?

The IRS should provide a list of all necessary records needed to establish proof that the original planning and design of the qualified facility includes carbon capture equipment. Records should include, but are not limited to, engineering design and plans, financing and investment decisions that include the construction of carbon capture equipment, and proof of order of some equipment.

.05 Specific Technologies. What clarifications, if any, are needed regarding the classification of industry-specific or emerging technologies that qualify for the § 45Q credit?

[11] Inspector General for Tax Administration, Letter to Senator Menendez, April 2020. https://www.menendez.senate.gov/imo/media/doc/TIGTA%20IRC%2045Q%20Response%20Letter%20FINAL%2004-15-2020.pdf

The Treasury/IRS, in consultation with the Secretary of Energy and the Administration of the Environmental Protection Agency, should issue clarification on how qualified carbon oxide utilized in industry-specific or emerging technologies can be determined to be ***permanently*** isolated from the atmosphere. Much of carbon utilization technologies are in their early stages of development and remain untested on a wider commercial scale. The Infrastructure Investment and Jobs Act provided around $9 billion for the Department of Energy (DOE) to support research, development, and demonstration, as well as infrastructure financing, for CCS technologies. Making the rules for eligibility too broad is a duplicative subsidy for CCS utilization technologies that are already receiving RD&D support from DOE but cannot permanently store or transform carbon oxide at their current stage.

Furthermore, the Treasury/IRS should carefully evaluate whether carbon oxide stored in products (e.g. CO_2-infused cement) that are unsold should qualify for the 45Q credits. In adopting the 45Q credit, Congress intended to incentivize the capture and storage/utilization of carbon that would otherwise be emitted into the atmosphere without the incentive from the credit. The 45Q credit is not intended to be a means of providing taxpayer subsidies for products that lack market viability otherwise and may not provide enduring contribution to mitigating climate change.

.06 Please provide comments on any other topics related to § 45Q credit that may require guidance.

Given the 45Q's history of fraudulent claims and the lack of transparency around the audit and recapture of fraudulently claimed credits, we urge the Treasury/IRS to issue guidance on recordkeeping and provide more transparency on information pertaining to the 45Q credit, like providing public available data on the number of claimants and the amount of credits claims, aggregated in a way that ensures compliance with confidentiality statutes.

In January 2021, the IRS issued a final rule (Docket Number: TD9944) and clarified recapture requirements for the 45Q credit. The final rule sets a three-year recapture period during which the Secretary is authorized to claw back benefits of the 45Q credit in the event stored or injected carbon is leaked. The recapture period, also referred to as the lookback period, ends the earlier of "three years after the last taxable year in which the taxpayer claimed a section 45Q credit or the date monitoring ends under subpart RR requirements or the CSA/ANSI ISO 27916:2019 standard". As a result, qualified facilities claiming the 45Q credit only need to retain data on stored or injected carbon for three years, which is inadequate. This lookback period of merely three years utterly fails to address any long-term liability issues associated with CO_2 leakage. To guarantee that captured carbon has a real, measurable, and enduring benefit to greenhouse gas emissions reduction and the climate, the IRS should consider extending the claw-back timeframe, requiring longer record retention periods, and enhance recapture mechanisms in case stored or injected carbon is leaked.

Furthermore, since the IRA made the 45Q credit eligible to be elected as a direct payment instead of a credit against tax liabilities and transferable to a transferee taxpayer unrelated to the qualified taxpayer, the IRS should also clarify how recapture would be implemented under the following scenarios:

1) when a company receives the credits in part or in full as tax-exempt income from a qualified taxpayer, and

2) when a company claiming the credit or a company receiving transferred credit goes bankrupt.

The administration must take all possible precautionary measures to protect taxpayer interests and prevent abuse of this program. The Joint Committee on Taxation estimated that the 45Q credit extension proposed in the Inflation Reduction Act could cost taxpayers $3.2 billion over the next decade. Actions to limit abuse of this program will protect taxpayers from unnecessary, additional costs.

We thank you for considering our comments on the Credit for Carbon Oxide Sequestration. Please let us know if you have any questions.

Sincerely,

President
Taxpayers for Common Sense